

Title (en)

ARCHIVAL RECORD FILMS FOR DIGITAL DATA STORAGE USING LOW POWER WRITE-LASER

Publication

**EP 0098046 B1 19880406 (EN)**

Application

**EP 83302975 A 19830524**

Priority

US 38169382 A 19820525

Abstract (en)

[origin: WO8304332A1] An optical storage system is contemplated, one employing a data-modulated writing laser beam and a non-erasing reading laser beam of predetermined wavelength. Improved optical media for such systems are described, these characterized by multiple layers whose optical characteristics and thickness are chosen to accommodate a prescribed writing and reading energy and wavelength and so provide an anti-reflection condition (2-AR) for unrecorded portions of the medium and a relatively higher reflectivity for recorded portions. A preferred optical medium includes a highly reflective aluminum layer (213), a relatively transparent polymer spacer layer (214), overlying the reflective layer (213) and an absorber layer (215) overlying the nucleation layer (ST), the absorber layer (215) being an archival metal rendered in an island configuration, adapted to be so affected by the contemplated write beam as to "agglomerate" and better transmit the read beam. For instance a noble metal so rendered (with a pre-strike in many cases) has given good results.

IPC 1-7

**G11B 7/24**

IPC 8 full level

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CPC (source: EP)

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Citation (examination)

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